10/580029 IAP12 Rec'd PCT/PTO 19 MAY 2006

ARTICLE 34 AMENDMENTS

AMENDMENT

(pursuant to Article 11 under the Japanese Patent Law)

To: Satoshi Yasukawa, Examiner

1. International Application Number: PCT/JP2004/017637

2. Applicant

Name:

TEIJIN LIMITED

Address:

6-7, Minamihommachi 1-Chome, Chuo-ku,

Osaka-shi, Osaka 541-0054 JAPAN

Nationality:

JAPAN

Country of Residence:

JAPAN

3. Representative

Name:

MIHARA, Hideko, Patent Attorney (9967)

Address:

c/o Teijin Intellectual Property Center

Limited

1-1, Uchisaiwaicho 2-chome, Chiyoda-ku,

Tokyo 100-0011 JAPAN

4. Object of the Amendment:

Specification and Claims

5. Content of the Amendment

The specification and claims are corrected as per the attached sheets. Specifically:

(1) The texts "honeycomb structure" on page 2, lines 24 and 27 of the specification are both corrected to "honeycomb structure having an average cavity inner diameter from 0.1 to 20 μm ".

- (2) The text "honeycomb structure" in claim 1 is corrected to "honeycomb structure having an average cavity inner diameter from 0.1 to 20 μm ".
 - (3) Claim 7 is deleted.
- 6. List of Attached Documents
- (1) Specification, page 2, substitute sheet
- (2) Page 14, Claims

(page 2)

However, if collagen is not handled at low temperature it gels and can no longer mix with cells, while its gel strength is also weak.

U.S. Patent Specification No. 6,197,061 discloses a method of growing chondrocytes in an alginate. However, the alginate is decomposed after use for cell growth and therefore in practice performs no function as scaffolding for injection of removed chondrocytes into affected areas.

Also, Japanese Unexamined Patent Publication No. 2001-157574 discloses the cell culturing matrix of a honeycomb structured film comprising a biodegradable polymer and an amphipathic polymer, but this publication nowhere refers to a cell culturing matrix and chondrocytes in a biodegradable film with a honeycomb structure comprising a phospholipid.

Furthermore, Japanese Unexamined Patent Publication No. 2002-335949 describes a method of forming a three-dimensional aggregate of hepatic tissue or myocardial tissue using the cell culturing matrix of a honeycomb structured film comprising a biodegradable polymer and an amphipathic polymer, but this method forms a multilayer structure by growing cells on both sides of the cell culturing matrix, whereas the cells themselves do not grow in a three-dimensional fashion.

DISCLOSURE OF THE INVENTION

It is an object of the present invention to provide a tissue regeneration matrix. It is another object of the invention to provide a complex of the tissue regeneration matrix with cells.

It is yet another object of the invention to provide a method for producing the complex of the tissue regeneration matrix with cells.

Other objects and advantages of the invention will become apparent from the detailed explanation which follows.

According to this invention, the aforementioned objects and advantages are achieved, firstly, by a tissue regeneration matrix comprising a film with a honeycomb structure having an average cavity inner diameter from 0.1 to 20 μ m, composed mainly of a polymer compound and a phospholipid.

The aforementioned objects and advantages of the invention are also achieved, secondly, by a complex of cells and a tissue regeneration matrix comprising a film with a honeycomb structure having an average cavity inner diameter from 0.1 to 20 μ m, composed mainly of a polymer compound and a phospholipid.